

HANDBOOK OF PHONOLOGICAL DATA
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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565 Chamorro	565 Chamorro	565 Chamorro
565 01 p-aspirated ^{01 02}	16 s ⁰⁴ [s-hacek] ⁶⁰	51 i [iota] ^{62 63} */e/
565 02 p-long ⁰²	17 s-long	52 e ³² *[iota] [epsilon] ⁶⁴
565 03 b ⁰²	18 m	53 ash [schwa] ^{33 68} (allo,neutral) */alpha/
565 04 b-long ⁰²	19 m-long	54 u [upsilon] ^{62 66} (allo,neutral) */o/
565 05 t ⁰²	20 n	55 o ^{32 34} *[upsilon] [o-open] ⁶⁷
565 06 t-long ⁰²	21 n-long	56 alpha *[schwa]
565 07 d ⁰²	22 n-palatal	57 yod
565 08 d-long ⁰²	23 eng	58 w ³⁵
565 09 k ⁰²	24 l	
565 10 k-long ⁰²	25 l-long	
565 11 g ⁰²	26 r-approximant-retroflex ⁰⁵ [r-flap] ⁶¹	
565 12 g-long ⁰²	27 glottal stop	
565 13 t/s	28 h ³¹	
565 14 d/z		
565 15 f		

565 \$a Chamorro \$d Northwest Austronesian \$e Guam \$f 50,000 \$g Merritt Ruhlen \$g William A. Foley (review)

565 \$a Topping, Donald M. \$b 1973 \$c Chamorro Reference Grammar \$g Honolulu: University of Hawaii Press

565 \$a INTONATION \$A "Since stress is usually penultimate in Chamorro and since it is usually accompanied by a low pitch level, we can predict that most Chamorro utterances will end with a rising intonation. This rising intonation at the end of utterances is another of the distinguishing features of Chamorro." (p.46-47)

565 \$a PHONOLOGICAL WORD \$A initial C: all but /w/ and the geminates; Topping considers word initial [glottal stop] non-phonemic \$A initial CC: /p-aspirated, g/ + /w/ (native words); /p-aspirated, k, b, g, f/ + /l/; /p-aspirated, t, k, b, d, g, f/ + /r-flap/; /p-aspirated, k, b, g, m, eng/ + /w/ (loan words) \$A final C: not geminates, voiced stops, affricates, liquids, /n-palatal/, nor /h/ \$A diphthongs: /alpha.i, alpha.o/; in loans /o.i, i.alpha, e.alpha, o.e, i.u/ \$A See p.24, 35ff.

565 \$a STRESS \$A "Stress is phonemic.... Although Chamorro has three measurable degrees of stress, these differences are not phonemic.... Most native Chamorro words of two syllables or more carry primary stress on the next to last syllable.... There are a number of exceptions to the 'penultimate rule.' Many words from Spanish retain their original primary stress pattern.... The penultimate stress rule is so strong in Chamorro that the primary stress shifts from one syllable to another when suffixes are added, so that the penultimate syllable is always the loudest one.... The penultimate rule...also applies generally to Chamorro phrases." (p.41-43) "Primary (or loud) stress is accompanied by a lower pitch level." (p.45)

565 \$a SYLLABLE \$A (C)CV(C)

565 \$a VOWEL HARMONY \$A When preceded by certain particles containing front vowels, the back vowels /u, o, alpha/ are fronted to /i, e, ash/ respectively in the first syllable of a stem. (p.52f) Topping also speaks of alternation between high and mid vowels as vowel harmony. In fact this is due entirely to the lowering of high vowels to mid in closed syllables - originally an allophonic rule in the native vocabulary. (p.53ff)

565 01 \$A "/p-aspirated/ is accompanied by a slight puff of air." (p.29) The author does not mention aspiration with respect to any other consonant. [MR]

- 565 02 \$A "The muscles of the face - particularly those around the lips - are more tense when pronouncing /p-aspirated/ than when pronouncing /b/.... All voiceless stops in Chamorro are tense; all voiced stops in Chamorro are lax." (p.29)
- 565 04 \$A For /s/ "the front part of the tongue comes very close to the alveo-palatal area." (p.32)
- 565 05 \$A /r-approximant-retroflex/ is "pronounced by curling the tip of the tongue back towards the palate, but without touching the roof of the mouth." (p.33-34)
- 565 31 \$A /h/ is often lost in syllable final position. (p.38)
- 565 32 \$A "In all probability the phonemes /e/ and /o/ became significantly different sounds [phonemic sounds] in Chamorro after Spanish loanwords began to be used frequently." (p.20) In the native vocabulary the mid vowels are restricted to closed syllables, as allophones of the high vowels. (p.54ff)
- 565 33 \$A "There is actually no sure way to determine whether [schwa] is an allophone of /ash/ or /alpha/. We might say, then, that both low vowels have allophone [schwa]." (p.22)
- 565 34 \$A The higher-mid allophone [o] occurs under stress, when /k/ or /eng/ does not follow. [JHC]
- 565 35 \$A /w/ "never occurs at the beginning of a word in Chamorro." (p.36) /w/ appears in two environments: (1) as the second segment of a diphthong, (2) as the second segment of the consonant clusters /k.w/, /g.w/, /p-aspirated.w/, and /b.w/. It is not clear whether these are labialized consonants, or a sequence of consonant + [w]. [MR] "Pre-Spanish Chamorro undoubtedly had /g.w/ and /p-aspirated.w/..., but the other combinations of consonant plus /w/ were introduced through Spanish loan words." (p.34)
- 565 60 \$A /s/ is realized as [s-hacek] "immediately preceding.../i/." (p.32)
- 565 61 \$A /r-approximant-retroflex/ is realized as [r-flap] "between two vowels." (p.34)
- 565 62 \$A /i/ and /u/ become lower-high when unstressed, or in a closed syllable. (p.20)
- 565 63 \$A /e/ becomes [iota] when unstressed in open syllables. (p.21)
- 565 64 \$A /e/ is realized as [epsilon] in closed syllables. (p.21)
- 565 66 \$A /o/ becomes [upsilon] when unstressed. (p.21)
- 565 67 \$A /o/ is realized as [o-open] "if...stressed and...followed by the consonants /k/ or /eng/ in the same syllable." (p.21)
- 565 68 \$A /ash/ and /alpha/ are realized as [schwa] when unstressed. (p.22)